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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/584,623

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Yuji Kuwabara

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EXAMINER

O HERN, BRENT T

ART UNIT

PAPER NUMBER

1794

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/584,623	<b>Applicant(s)</b> KUWABARA ET AL.	
	<b>Examiner</b> Brent T. O'Hern	<b>Art Unit</b> 1794	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 June 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-7, 9, 11 and 13-14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Higuchi et al. (JP-258994 A), (See Applicant's IDS.). See translation.

Higuchi ('994) teaches dry fractionation method of fat or oil which comprises the steps of fractionating fat or oil (A) containing G2U and GU2 through crystallization/solid-liquid separation into a crystal fraction of concentrated G2U (AF) and a liquid fraction of concentrated GU2 (AL) (*See p. 10, embodiment 1, p. 6, para. 2 to p. 9, para. 2 and claims 1-8.*), mixing the crystal fraction (AF) with liquid G2U-containing fat or oil (B) whose GU2 concentration is lower than that of the liquid fraction (AL), and then separating the mixture into a crystal fraction (BF) and a liquid fraction (BL), wherein G represents a saturated or trans acid form fatty acid residue, U represents a cis form unsaturated fatty acid residue, G2U represents a triglyceride of two G-residues and one

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U-residue bonded together, and GU2 represents a triglyceride of one G-residue and two U-residues bonded together, wherein the liquid fraction (BL) is used by recycling as a part or all of the fat or oil (A), wherein the fat or oil (A) is vegetable butter or a middle-melting point fraction thereof, liquid oil and interesterified oil obtained by selectively introducing a saturated fatty acid to 1,3-positions of fat or oil which is rich in oleic acid at the 2-position, or isomerized hydrogenated oil, wherein the vegetable butter is palm oil, shea butter or illipe butter, wherein G2U is 1,3-di-saturated-2-unsaturated triglyceride (SUS, where S represents a saturated fatty acid residue and U represents a cis form unsaturated fatty acid residue), wherein the saturated fatty acid residue (S) has 16 to 22 carbon atoms, and the unsaturated fatty acid residue (U) has 18 carbon atoms, wherein the mixing ratio of the crystal fraction (AF) to the fat or oil (B) is in the range from 1:1 to 1:4, wherein the temperature-controlled fat or oil (B) is mixed with a cake of the crystal fraction (AF), wherein the fat or oil (A) is vegetable butter or a middle-melting point fraction thereof, liquid oil and interesterified oil obtained by selectively introducing a saturated fatty acid to 1,3-positions of fat or oil which is rich in oleic acid at the 2-position, or isomerized hydrogenated oil, wherein G2U is 1,3-di-saturated-2-unsaturated triglyceride (SUS, where S represents a saturated fatty acid residue and U represents a cis form unsaturated fatty acid residue) (*See p. 10, embodiment 1, p. 6, para. 2 to p. 9, para. 2 and claims 1-8 where the IV of the 40 parts low-melting fraction that is added is 67.5 which is lower than the 67.8 IV 76.3 part low-melting point fraction, thus, the GU2 concentration of the added material is lower since it is more saturated, lower IV.*) and inherently teaches wherein liquid G2U-containing fat or oil (B) whose GU2 concentration

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is lower than that of the liquid fraction (AL) is the fat or oil (A), (*See p. 10, embodiment 1, p. 6, para. 2 to p. 9, para. 2 and claims 1-8 where the GU2 concentration is lower than that of the liquid fraction (AL) in the fat or oil (A) since the oil that is added back has a lower IV, thus, lower concentration of GU2.*).

In the alternative, a person having ordinary skill in the art would obviously appreciate or provide that the oil (B) with a lower GU2 concentration in order to provide a mixture with a higher melting point and better filtration without significantly melting the solid crystals. Thus, a rejection under 35 USC 102/103 is proper (*See MPEP 2112.*).

2. Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higuchi et al. (JP-258994 A) (See Applicant's IDS.) in view of JP 2003-134998 (See Applicant's IDS.).

Regarding claim 8, Higuchi ('994) teaches the method discussed above, however, fails to expressly disclose wherein the fat or oil (A) is interesterified oil whose starting material is the liquid fraction (AL).

However, JP 2003-134998 teaches fractionating interesterified oil (*See para. 6.*). Furthermore, it would have been obvious to use the above process as all of the above materials are oil/fat mixtures and the process provides oil/food compositions with uniform consistency.

Therefore, it would have been obvious to use the above method as taught by Higuchi ('994) for interesterified oils as taught by JP 2003-134998 in order to provide compositions with uniform consistency.

Regarding claim 10, Higuchi ('994) teaches wherein the mixing ratio of the crystal fraction (AF) to the fat or oil (B) is in the range from 1:1 to 1:2 (*See p. 10, embodiment 1, p. 6, para. 2 to p. 9, para. 2 and claims 1-8.*).

3. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Higuchi et al. (JP-258994 A) (See Applicant's IDS) in view of JP 2-14290 (See Applicant's IDS.).

Higuchi ('994) teaches the method discussed above, however, fails to expressly disclose wherein the crystal fraction (AF) is crushed and mixed with the fat or oil (B).

However, JP 2-14290 (See Applicant's IDS.) teaches fractionating oils/fats wherein the crystal fraction (AF) is crushed and mixed with the fat or oil (B) (*See Claims 1-9.*). Furthermore, it would have been obvious to crush the crystal fraction (AF) and mix it with the fat or oil (B) in order to provide a flowable mixture that can be filtered through the filters for the purpose of providing efficiently produced solid/liquid products with improved consistency.

Therefore, it would have been obvious to crush the crystal fraction (AF) and mix it with the fat or oil (B) in order to provide a mixture that can be filtered through the filters in order to efficiently provide solid/liquid products with improved consistency.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent T. O'Hern whose telephone number is (571)272-0496. The examiner can normally be reached on Monday-Thursday, 9:00-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on (571) 272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brent T. O'Hern/  
Examiner  
Art Unit 1794  
July 18, 2009